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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,505	06/14/2001	Bipul Binit Sinha	oracle01.016	7778

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EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT PAPER NUMBER

2161

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,505

Applicant(s)

SINHA ET AL.

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Prosecution Reopened

In view of the Appeal Brief filed on June 19, 2006, PROSECUTION IS HEREBY REOPENED as set forth below.

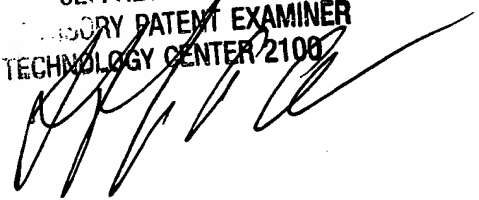
To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

SEPT 19 2006
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100



Claims Status

Claims 2-31 are pending. Claim 1 has been cancelled. Claims 2-31 are rejected as detailed below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 11 recites “using the retained state to optimize the protocol.” The specification does not contain a clear and concise description such that a skilled artisan can make and use the present invention because “retained state” is not even mentioned in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 provides for the use of the retained state to optimize the protocol, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 11 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). In this regard claim 11 claims “using the retained state to optimize the protocol.”

Furthermore, the **claimed** (emphasis added) invention as a whole must be useful and accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” *State Street*, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of “real world” value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966)).

Claim 11 as claimed lacks “real world value” because there is no final result. Since there is no final result, the claimed invention as a whole is not drawn to a practical application. The final limitation “using the retained state to optimize the protocol” cannot be considered to have real world value because it is unclear what is achieved as a result of optimizing the protocol. Furthermore, it is well-known in the art that “[t]he word protocol is often used, sometimes confusingly, in reference to a multitude of standards affecting different aspects of communication, such as file transfer, handshaking, and network transmissions.”¹ The claimed “optimized protocol” is such an example of confusion because the claim limitation “augmenting a message by adding protocol state information” does not comply with the art accepted definition of protocol, i.e., a set of

¹ Microsoft Computer Dictionary, Fifth Edition

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rules or standards designed to enable computers to connect with one another and to exchange information with as little error as possible.² However, even if “augmenting a message” can be considered as a communications protocol, it lacks “real world value” because there is no useful result obtained subsequent to augmenting of the message. Claim 11 lacks real world value because there is no useful, concrete and tangible result flowing from (1) augmenting the message to add protocol state information, and (2) using the retained state to optimize the protocol.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,335,343 issued to Lampson et al (hereafter Lampson) in view of US Pat No 6,538, 668 issued to Ruberg et al (hereafter Ruberg, as best examiner is able to ascertain.

Claims 10, 11, 22 and 26:

Lampson discloses:

retaining the state of the other component indicated in the augmented message [col 10, lines 14-25, coordinator counts yes-votes and no-votes implies retaining];

using the retained state to optimize the protocol [Fig 13, col 10, lines 7-25, no second phase of the two phase protocol for read-only, no commit or abort message, col 10, lines 1-5].

Lampson discloses the elements of the claimed invention as noted above but does not disclose receiving an augmented one of the messages from the other component, the other component having

² Microsoft Computer Dictionary, Fifth Edition

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augmented the message by adding protocol state information to the message, the protocol state information indicating a state of the other component that is relevant to the protocol. Ruberg discloses receiving an augmented one of the messages from the other component, the other component having augmented the message by adding protocol state information to the message, the protocol state information indicating a state of the other component that is relevant to the protocol [col 13, lines 40-45]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lampson to include receiving an augmented one of the messages from the other component, the other component having augmented the message by adding protocol state information to the message, the protocol state information indicating a state of the other component that is relevant to the protocol as taught by Ruberg for the purpose of transmitting information from the terminal (or controlled program) to the server [col 13, lines 30-35].

Claims 2, 6, 23 and 27:

The combination of Lampson and Ruberg discloses the limitations of claims 11, 5, 22, 26 and furthermore, Lampson discloses the protocol ensures that the results of the transaction are consistent in the components and in the step of receiving an augmented one of the messages, the protocol state information indicates whether the transaction will modify data in the other component [Fig 12, col 9, lines 58-68]

Claims 3, 7, 24 and 28 :

The combination of Lampson and Ruberg discloses the limitations of claims 11, 2, 5, 6, 22, 23, 26, 27 and furthermore, Lampson discloses the protocol being optimized by the first component is a two-phase commit protocol, and the other component receives an abort message of the two-phase commit protocol when the protocol state indicates that the transaction will not modify the data of the other component [Fig 6, step 33]

Claims 4, 8, 25 and 29:

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The combination of Lampson and Ruberg discloses the limitations of claims 11, 2, 3, 5-7, 22-24, 26-28 as noted above and furthermore, Lampson discloses the distributed system is a distributed database system and the coordinator and the other component are database systems therein [Figs 1 and 2, col 4, lines 40-55]

Claim 5:

The combination of Lampson and Ruberg discloses the following:

determining the protocol state [Lampson, col 10, lines 14-25, coordinator counts yes-votes and no-votes implies retaining]

augmenting a message of the transaction by adding protocol state information to the message, the protocol state information indicating the protocol state of the component [Ruberg, col 13, lines 40-45]

the first component using the protocol state to optimize the protocol [Lampson, Fig 13, col 10, lines 7-25, no second phase of the two-phase protocol for read-only, no commit or abort message, col 10, lines 1-5]

Claim 9:

The combination of Lampson and Ruberg discloses:

receiving a message of the transaction from the cohort, the message being augmented with state information indicating whether the transaction modifies the cohort's data [Ruberg, col 13, lines 40-45]

retaining the state information for the cohort [Lampson, col 10, lines 14-25, coordinator counts yes votes and no votes]

if the state information for the cohort indicates that the transaction does not modify the cohort's data, sending an abort message of the two-phase commit protocol to the cohort [Lampson, col 4, lines 35-55]

Claim 12:

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The combination of Lampson and Ruberg discloses the elements of claim 11 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor performs the method of claim 11 [Fig 2, 16]

Claim 13:

The combination of Lampson and Ruberg discloses the elements of claims 2, 11 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 2 [Fig 2, 16]

Claim 14:

The combination of Lampson and Ruberg discloses the elements of claims 2, 3, 11 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 3 [Fig 2, 16]

Claim 15:

The combination of Lampson and Ruberg discloses the elements of claims 2, 3, 4, 11 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 4 [Fig 2, 16]

Claim 16:

The combination of Lampson and Ruberg discloses the elements of claim 5 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 5 [Fig 2, 16]

Claim 17:

The combination of Lampson and Ruberg discloses the elements of claims 5, 6 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 6 [Fig 2, 16].

Claim 18:

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The combination of Lampson and Ruberg discloses the elements of claims 5, 6, 7 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 7 [Fig 2, 16].

Claim 19:

The combination of Lampson and Ruberg discloses the elements of claims 5-8 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 8 [Fig 2, 16].

Claim 20:

The combination of Lampson and Ruberg discloses the elements of claim 9 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 9 [Fig 2, 16].

Claim 21:

The combination of Lampson and Ruberg discloses the elements of claim 10 as noted above and furthermore, Lampson discloses the data storage device contains code which, when executed by a processor, performs the method of claim 10 [Fig 2, 16].

Claim 30:

The combination of Lampson and Ruberg discloses the following elements:
retained state information that retains state of a cohort, the state indicating whether the transaction will modify the cohort's data [Lampson, col 10, lines 14-25, coordinator counts yes-votes and no-votes implies retaining], the coordinator receiving a message of the transaction from the cohort which has been augmented with the state information [Ruberg, [col 13, lines 40-45] retaining the state information from the augmented message in the retained state information [col 10, lines 14-25], and if the retained state information for the cohort indicates that the transaction does not modify the cohort's data, sending an abort message of the two-phase protocol to the cohort [col 4, lines 35-55]

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Claim 31:

Lampson discloses:

a message of the transaction that is augmented with state information indicating whether the transaction will modify the cohort's data,[Ruberg, col 13, lines 40-45], the cohort sending the message to the coordinator and the coordinator retaining the state information [Lampson, Fig 12, step 81, col 10, lines 14-25] and if the retained state information for the cohort indicates that the transaction does not modify the cohort's data, sending an abort message of the two-phase commit protocol to the cohort [Lampson, col 4, lines 35-55]

Response to Arguments

Applicant's arguments filed in Appeal Brief of June 19, 2006 have been carefully considered but are moot based on above new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

9/1/2006

